

## 9. Randy

**Program Name: Randy.java**

**Input File: randy.dat**

Randy loves to go bowling, and needs your help writing a program to calculate the final score of a game, given a full score card. The final score is the sum of all 10 frames according to the following standard rules of bowling.

### **Strike (Denoted as X)**

If you knock down all 10 pins in the first shot of a frame, you get a strike. No further shot is rolled for the current frame.

How to score: A strike earns 10 points for the frame, plus the sum of the pins knocked down in the next *two* shots in following frames.

### **Spare (Denoted as / )**

If you knock down all 10 pins using both shots of a frame, you get a spare.

How to score: A spare earns 10 points for the frame, plus the number of pins knocked down in the first shot of the next frame.

### **Open Frame**

If you do not knock down all 10 pins using both shots of your frame (9 or fewer pins knocked down), you have an open frame.

How to score: An open frame only earns the number of pins knocked down in that frame.

### **The 10th Frame**

The 10th frame is a bit different:

If you roll a strike in the first shot of the 10th frame, you get 2 more shots immediately.

If you roll a spare in the first two shots of the 10th frame, you get 1 more shot immediately.

If you leave the 10th frame open after two shots, the game is over and you do not get an additional shot.

How to Score: The score for the 10th frame is the total number of pins knocked down for all the rolls in the 10th frame.

**Input:** Input starts with a line containing an integer N ( $1 \leq N \leq 10$ ), the number of test cases. The following N lines consist of a single player's full score card from a complete game of bowling. An X represents a strike, and a / represents a spare. All inputs will be valid, complete games. No validation of input is needed.

**Output:** For each test case, output the final score of that game.

### **Sample Input:**

```
10
X9/406/X90XX636/X
XXXXXXXXXXXXX
53628180908160819052
X639/XXX5/8/6/7/X
0/0/0/0/0/0/0/0/0/0/0
X0/0/X0/00XXX0/X
XXXXXXXXXXXXX9
9/06X8/3/X06367/X62
81X9/XX903/XXX5/
X4/30XX42X9/7/XXX
```

### **Sample Output:**

```
160
300
82
194
100
170
299
138
201
169
```